



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/775,838

02/10/2004

Ulrich Boetzel

068758.0171

1648

31625

7590

08/01/2006

BAKER BOTTS L.L.P.
PATENT DEPARTMENT
98 SAN JACINTO BLVD., SUITE 1500
AUSTIN, TX 78701-4039

EXAMINER

AGBOTTAH, AWUDZI Z

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/775,838

Applicant(s)

BOETZEL ET AL.

Examiner

Awudzi Z. Agbottah

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10 February 2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3 recites the limitation "the time response" . There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4, 6-7,9 are rejected under 35 U.S.C. 102(e) as being anticipated by Johansson (**United States Patent No. US 6,975,613 B1**).

5. Consider claim 1, Johansson discloses a master-slave architecture where communication travels between master and slave devices using Time Division Duplex (TDD) frames (time slots) (**Column 6, Lines 5-16**). Johansson also discloses a master-slave scheduler which is responsible for determining when each of the slave devices will be active (acknowledging the existence of the connection to master station) (**Column 7, Lines 10-30**). During the active mode of each slave unit is repeatedly addressed by the master unit (**Column 6, Lines 5-9**).

Johansson also discloses that active slave devices are indicated to the master-slave scheduler (**Column 7, Lines 48-58**). This reads to the applicant's claim of "...identifying an operating mode of the slave station in the existing connection..."

Additionally Johansson discloses that in the master-slave scheduler and piconet scheduler are part of the scatternet scheduler (addressing scheme). The piconet scheduler decides when a slave device will become active (**Column 6, Lines 10-30, Lines 54-58; Column 8, Lines 3-7**). This reads to the applicant's claim of "...responding by the slave station in accordance with a time addressing scheme which is dependant on the identified operating mode of the slave station..."

6. Consider claim 2 as applied to claim 1 above, Johansson discloses his invention is described in accordance with Bluetooth networks (**Column 5, Lines 66-67**). This reads to the applicant's claim of "...wherein the data is transmitted in accordance with the Bluetooth standard..."

7. Consider claim 3 as applied to claim 1 above. Johansson discloses a period of reduced activity called SNIFF mode (**Column 8, Lines 21-25**). Johansson additionally discloses increased data sent from the master to slave during active time intervals (**Column 7, Lines 10-41**).

8. Consider claim 4 as applied to claim 3 above. Johansson discloses an intra piconet scheduler in which determines when slaves are addressed during and active time period (**Column 7, Lines 10-30, Lines 48-58**). The active time period is determined by an algorithm (**Column 7, Lines 60-67**).

9. Consider claims 6 and 9. Johansson discloses the Bluetooth (data transmission system, digital cordless communication system) master-slave architecture in which is invention is based upon. It involves communication between the master and slave devices (**Column 6, Lines 5-22**). The slave station has various operating modes, an active and power save mode (**Column 7, Lines 32-39**). Additionally Johansson discloses a scatternet scheduler (time addressing scheme) that determines when slave

Art Unit: 2632

devices will become active (**Column 7, Lines 10-30**). In other words the scatternet scheduler is dependent on the operating mode of the slave station. During the active mode of each slave unit is repeatedly addressed by the master unit (**Column 6, Lines 5-9**).

10. Consider claim 7 as applied to claim 6 above. Johansson discloses a period of reduced activity called SNIFF mode (**Column 8, Lines 21-25**). Johansson additionally discloses increased data sent from the master to slave during active time intervals (**Column 7, Lines 10-41**).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 2632

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johansson (**United States Patent No. US 6,975,613 B1**) in view of Raith et al. (**United States Patent No. 5,806,007**).

13. Consider claim 8 as applied to claim 7 above. Johansson discloses the claimed invention but lacks to disclose "...when the slave station is in the active time interval of a mode with reduced activity, the slave station is addressed repeatedly and successively by the master station depending on the free time slots in the active time interval, and the free time slots for response can be selected in a variable manner." However Raith et al. discloses a mobile station (slave) that is active for a user selectable period (**Column 12, Lines 65-66**), in which it is continuously reading data (**Column 12, Lines 56-67; Column 13, Lines 1-5**). In light of Raith et al. it would be obvious to one of ordinary skill in the art to combine the teachings of Johansson and Raith et al. for the purpose of efficiently implementing a method where the slave device receives more data when it is in an operating state that can handle increased data rates.

Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johansson (**United States Patent No. US 6,975,613 B1**) in view of Levine et al. (**United States Patent Application Publication no. US 2003/0177187 A1**).

14. Consider claim 5 as applied to claim 1 above. Johansson discloses the claimed invention but fails to disclose method used in digital cordless communication systems and in computer-controlled entertainment systems or computer-controlled games systems. However Levine et al. discloses the compatibility of mobile phones and video game consoles (**Page 9, Paragraph 195, Line 18**), with other wireless data protocols, in particular Bluetooth, which uses the master-slave architecture (**Page 9, Paragraph 195**). In light of Levine et al., it would be obvious to one of ordinary skill in the art to combine the teachings of Johansson and Levine et al. for the purpose of integrating the data transmission method to be used with popular commercial technology for better commercial viability.

15. Consider claim 10. Johansson discloses a Bluetooth based master-slave architecture in which data is data is exchanged between the master unit and slave unit (**Column 6, Lines 5-9**). The slave station has various operating modes. For example there is an active mode along with a HOLD and SNIFF (**Column 7, Lines 37-41**). Johansson additionally discloses a piconet scheduler, which determines the mode of

Art Unit: 2632

the slave device. When the slave device is active, the master and slave are in communication (**Column 7, Lines 10-31; Lines 48-58**).

Johansson discloses the claimed invention but fails to disclose computer-controlled or computer controlled games systems using the above disclosed implementation. However Levine et al. discloses video game consoles (computer-controlled entertainment system) that uses the Bluetooth standard (**Page 9, Paragraph 195**). In light of Levine et al., it would be obvious to one of ordinary skill in the art to combine the teachings of Johansson and Levine et al. for the purpose of integrating the data transmission method to be used with popular commercial technology for better commercial viability.

Conclusion

16. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Art Unit: 2632

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22314

17. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Awudzi Z. Agbottah whose telephone number is (571) 270-1114. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Perez-Gutierrez can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Application/Control Number: 10/775,838

Page 10

Art Unit: 2632

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Awudzi Agbottah

A.Z.A../aza

July 25, 2006

EDAN ORGAD
PATENT EXAMINER/TELECOMM.

Edan Orgad 7/24/06